

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): An active dynamic damper comprising: a supporting member having a mounting plate portion and a central supporting portion fixed to a center of a surface of the mounting plate portion; a mass member which surrounds the central supporting portion of the mounting plate portion and is disposed ~~on a side of a surface of the mounting plate portion~~ such that the mass member is departed from the mounting plate portion, the mass member configured to vibrate along an axial direction of said central supporting portion; a rubber elastic body connecting portion configured to connect the central supporting portion of the supporting member with the mass member elastically; and a vibration element configured to vibrate the mass member with a driving force generated by an input of a control pulse signal corresponding to vibration of a vibration generating source, said mounting plate portion being fixed on a vibration damping object member, wherein said mounting plate portion is fixed on the vibration damping object member through a rubber elastic supporting portion such that said mounting plate portion is departed from said vibration damping object member.

Claim 2 (Previously Presented): The active dynamic damper according to claim 1 wherein said control pulse signal is formed by overlaying a pulse width modulated carrier signal having a control frequency of several kHz to several tens of kHz on a reference pulse signal having a same frequency as a vibration frequency of an input pulse signal corresponding to vibration of a vibration generating source and adjusted in terms of phase and gain.

Claim 3 (Original): The active dynamic damper according to claim 2 wherein a resonance frequency of said rubber elastic body supporting portion with respect to said mass member is set up to a frequency region higher than said vibration frequency and lower than the control frequency of said carrier signal.